Amendments to the Claims

1-124. (Canceled)

125. (New) A structural, stainless steel alloy comprising, in combination, by we ght: about 0.15 to 0.30% carbon (C), about 6 to 18% cobalt (Co), at least about 2.5 of nickel (Ni), about 8.0 to 11.0% chromium (Cr), about 1.0 to 3.0% molybdenum (Mo), less than about 0.8% vanadium (V), and less than about 3% tungsten (W), the balance essentially iron (Fe) and incidental elements and impurities, characterized in that the alloy has a predominantly lath martensite microstructure essentially without topologically close packed intermetallic phases and said carbon (C) is in a dispersion of nanoscale, predominantly M_2C carbide particles having a nominal dimension less than about ten (10) nanometers in diameter, where M is two or more elements selected from the group consisting of Cr, Mo, W, V, Nb and Ta.

126. (New) The alloy of claim 125 wherein M comprises Cr and Mo.

127. (New) The alloy of claim 125 wherein M compromises Cr, Mo and V.

128. (New) The alloy of claim 125 wherein M comprises Mo and one or more elements selected from a group consisting of W, V, Nb and Ta.

129. (New) The alloy of claim 125, wherein the alloy is processed to an M_2C carbide particle strengthened ultimate tensile strength greater than about 260 ksi.

130. (New) The alloy of claim 125 processed to a toughness to strength ratio (K_{IC} YS) equal to or greater than about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is the yield strength.

131. (New) The alloy of claim 125 processed to a tensile strength greater than about 260 ksi and a toughness to strength ratio strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$

where K_{IC} is the plane strain fracture toughness and YS is yield strength.

132. (New) The alloy of claim 125 wherein cementite (Fe_3C) dissolution is effectively complete.

133. (New) A structural stainless steel alloy comprising in combination by weight: about 0.15 to 0.3% carbon (C); about 6 to 18% cobalt (Co); at least about 2.5% nickel (Ni); about 8 to 11% chromium (Cr); molybdenum (Mo); tungsten (W) and vanadium (V), the molybdenum (Mo) being present in an amount by weight greater than about 1.0 and less than about 3%, the tungsten (W) being present in an amount by weight less than about a 3% and the vanadium (V) being present in an amount by weight less than about 0.8%; the balance essentially iron (Fe) and incidental elements and impurities characterized in that the steel alloy comprises a corrosion resistant, lath martensitic microstructure essentially without topologically close packed intermetallic phases and including a dispersion of nanoscale, predominantly M_2C carbide particles having a nominal diameter of ten (10) nanometers or less where M comprises Mo and one or more elements selected from the group consisting of Cr, W and V and wherein cementite (Fe_3C) dissolution is effectively complete.

134. (New) The alloy of claim 133 processed to an ultimate tensile strength greater than about 260 ksi.

135. (New) The alloy of claim 133 processed to a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is the yield strength.

136. (New) The alloy of claim 133 processed to a tensile strength greater than about 260 ksi and a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is yield strength.

137. (New) The alloy of claim 133 wherein M comprises Cr, Mo and V.

138. (New) A structural stainless steel alloy comprising in combination by weight: about 0.15 to 0.30% carbon (C); about 6 to 18% cobalt (Co), at least about 2.5% nickel (Ni), about 8.0 to 11.0% chromium (Cr), about 1.0 to 3.0% molybdenum (Mo), less than about 0.8% vanadium (V), and less than about 3% tungsten (W), the balance essentially iron (Fe) and incidental elements and impurities, characterized in that the alloy has a predominently lath martensite microstructure essentially without topologically close packed intermetallic phases and said carbon (C) is in a dispersion of nanoscale, predominantly M_2C carbide particles having a nominal dimension less than about ten (10) nanometers in diameter, where M is two or more elements selected from the group consisting of Cr, Mo, W and V.

139. (New) The alloy of claim 138 wherein M comprises Cr, Mo, W and V.

140. (New) The alloy of claim 138 wherein the alloy is processed to an ultimate tensile strength greater than about 260 ksi.

141. (New) The alloy of claim 138 processed to a toughness to strength ratio (K_{IC} is the plane strain fracture toughness and YS is the yield strength.

142. (New) The alloy of claim 138 processed to a tensile strength greater than about 260 ksi and a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.2 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is yield strength.